

## **AMENDMENTS TO THE CLAIMS**

### **In the Claims:**

The following listing of claims replaces all prior versions and listings of claims in the application.

### **Listing of Claims:**

1. (Currently Amended) A computer-implemented information retrieval method, comprising the steps of:

accepting a user input that selects or de-selects at least one of a plurality of data groupings within a filter tree table, said data groupings being associated with a plurality of data items in an unfiltered data table;

generating a filtering query, by specifying including at least one query operator, based on the from selected data groupings of a filter tree table;

running said filtering query against [[an]] said unfiltered data table containing items of data;

receiving a plurality of filtered data items from said unfiltered data table in response to said filtering query;

populating creating a filtered data table with said plurality of filtered data items by receiving one or more data items filtered from said unfiltered data table in response to said filtering query and placing said received data items in said filtered data table; and

displaying data items in said filtered data table[[:]] and

displaying filter data in said filter tree table, with said filter data including selected data groupings;

accepting a user input that selects or de-selects a data grouping to be filtered and displayed; and

branching back to the generating step upon receipt of said user input.

2. (Currently Amended) The method of claim 1, further comprising the steps of:  
selecting one or more data sets automatically or in response to a user input;  
receiving a plurality of data items from said one or more data sets;  
creating said unfiltered data table ~~by receiving in said unfiltered data table a~~ based on  
said plurality of data items from said one or more data sets;  
displaying ~~said plurality of data items of~~ said unfiltered data table; and  
updating said filter tree table~~[[,]]~~ with ~~said filter tree table including~~ selectable data  
groupings associated with said plurality of data items ~~for said one or more data sets~~.
3. (Original) The method of claim 1, further comprising the steps of:  
generating a summary query from selected data groupings of said filter tree table;  
running said summary query against said filtered data table;  
generating a summary result comprising a data item count for each selected data  
grouping; and  
updating said filter tree table with said summary results.
4. (Currently Amended) The method of claim ~~[[1]]~~ 3, further comprising the step of  
generating one or more data item results in response to said summary query.
5. (Original) The method of claim 1, further including a preliminary step of selecting a  
data set.
6. (Original) The method of claim 1, wherein said data set comprises a database.
7. (Original) The method of claim 1, wherein said data set comprises one or more data  
tables.
8. (Original) The method of claim 1, wherein a first filter level of said filter tree table  
corresponds to a column in said data set.
9. (Original) The method of claim 1, further including the step of displaying a data item  
count for a particular data grouping.

10. (Currently Amended) The method of claim ~~[[1]]~~ 9, further including the step of ~~displaying a data item count for a particular data grouping and~~ updating all data item counts upon a data grouping selection or de-selection by said user.

11. (Original) The method of claim 1, wherein all data groupings are automatically recalculated upon a selection or de-selection by said user.

12. (Original) The method of claim 1, wherein said generating a filtering query step includes creating said filtering query based on selected data groupings.

13. (Original) The method of claim 1, wherein said filtering query is a SQL query.

14. (Currently Amended) The method of claim 1, wherein said ~~accepting a~~ user input includes ~~a user clicking on a selection icon, with said selection icon~~ corresponding to a predetermined data grouping.

15. (Currently Amended) A computer-implemented information retrieval method, comprising the steps of:

accepting a user input that selects at least one data source ~~selecting one or more data sets;~~

receiving a plurality of data items from said data source;

creating an unfiltered data table ~~by receiving in said unfiltered data table a~~ that includes said plurality of data items from said one or more data sets;

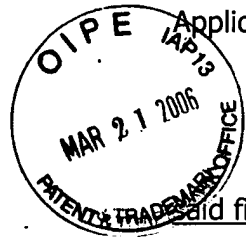
displaying ~~said plurality of data items of~~ said unfiltered data table;

generating a filter tree table, ~~with said filter tree table including~~ that includes selectable data groupings associated with said plurality of data items ~~for said one or more data sets;~~

accepting a user input that selects or de-selects at least one data grouping;

generating a filtering query, based on the ~~from~~ selected data groupings, ~~of said filter tree table, with said filtering query comprising one or more~~ that includes at least one query operator~~[[s]]~~;

running said filtering query against said unfiltered data table;



receiving a plurality of filtered data items from said unfiltered data table in response to said filtering query;

creating a filtered data table that includes said plurality of filtered data items by  
~~receiving in said filtered data table one or more data items filtered from said unfiltered data table in response to said filtering query;~~

~~displaying data items in said filtered data table;~~

generating a summary query based on the ~~from~~ selected data groupings ~~of said filter tree table;~~

~~running said summary query against said filtered data table;~~

~~generating a summary result comprising~~ including a data item count for each selected data grouping;

~~updating said filter tree table with said summary results;~~

~~displaying filter data in said filter tree table, with said filter data~~ including said selected data groupings and associated data item counts; and

~~accepting a user input that selects or de-selects a data grouping to be filtered and displayed; and~~

~~branching back to said~~ accepting a user input that selects or de-selects a data grouping  
~~updating a filter tree table step upon receipt of a user input.~~

16. (Currently Amended) The method of claim 15, wherein said data set source comprises a database.

17. (Currently Amended) The method of claim 15, wherein said data set source comprises one or more data tables.

18. (Currently Amended) The method of claim 15, wherein a first filter level of said filter tree table corresponds to a column in said data set source.

19. (Original) The method of claim 15, wherein data item counts are automatically updated upon a data grouping selection or de-selection by said user.

20. (Original) The method of claim 15, wherein all data groupings are automatically recalculated upon a selection or de-selection by said user.

21. (Original) The method of claim 15, wherein said generating a filtering query step includes creating said filtering query based on selected data groupings.

22. (Original) The method of claim 15, wherein said filtering query is a SQL query.

23. (Currently Amended) The method of claim 15, wherein said ~~accepting~~ a user input includes ~~a user~~ clicking on a selection icon, ~~with said selection icon~~ corresponding to a predetermined data grouping.

24. (Original) The method of claim 15, wherein said summary result further includes a data item result for said each selected data grouping.

25. (Currently Amended) An information retrieval process, comprising the steps of:  
~~providing a data set to an unfiltered data table;~~

generating a filtering query based upon one or more ~~by selecting one or more query operators and with said one or more query operators corresponding to~~ user-selected data groupings in a filter tree table, said data groupings being associated with a plurality of data items in an unfiltered data table;

running said filtering query against said unfiltered data table;

receiving one or more filtered data items ~~in a filtered data table, with said one or more data items being filtered~~ from said unfiltered data table in response to said filtering query;

displaying said one or more filtered data items in said filtered data table;

generating a summary query from the selected data groupings in said filter tree table;

running said summary query against said filtered data table to produce a summary result, ~~with said summary result comprising~~ including a data item count for each selected data grouping;

providing said summary result to said filter tree table;

displaying said filter tree table; and

~~accepting a user input to said filter tree table, with said user input comprising a selection or de-selection of a data grouping; and~~

~~branching back to the said step of generating a filtering query upon receipt of a user input.~~

26. (Currently Amended) The information retrieval process of claim 25, further comprising the steps of:

selecting one or more data sets automatically or in response to a user input;

receiving said plurality of data items from said one or more data sets;

~~creating said unfiltered data table by receiving in said unfiltered data table~~ based on said plurality of one or more data items from said one or more data sets;

~~displaying said one or more data items of said unfiltered data table; and~~

~~updating said filter tree table[[,]] with said filter tree table including selectable data groupings for~~ associated with said plurality of data items ~~said one or more data sets.~~

27. (Original) The information retrieval process of claim 25, further including a preliminary step of selecting a data set.

28. (Currently Amended) The information retrieval process of claim [[25]] 27, wherein said data set comprises a database.

29. (Currently Amended) The information retrieval process of claim [[25]] 27, wherein said data set comprises one or more data tables.

30. (Currently Amended) The information retrieval process of claim [[25]] 27, wherein a first filter level of said filter tree table corresponds to a column in said data set.

31. (Original) The information retrieval process of claim 25, wherein data item counts are automatically updated upon a data grouping selection or de-selection by said user.

32. (Original) The information retrieval process of claim 25, wherein all data groupings are automatically recalculated upon a selection or de-selection by said user.

33. (Canceled).

34. (Original) The information retrieval process of claim 25, wherein said filtering query is a SQL query.

35. (Currently Amended) The information retrieval process of claim 25, wherein said user-selected data groupings are input by accepting a user input includes a user clicking on a selection icon, ~~with said selection icon~~ corresponding to a predetermined data grouping.

36. (Original) The information retrieval process of claim 25, wherein said summary result further includes a data item result for said each selected data grouping.

37. (Currently Amended) An information retrieval apparatus, comprising:

a processor;

a user interface, communicating with said processor, ~~and capable of interfacing to~~ interface with a user;

an unfiltered data table, communicating with said processor, ~~and capable of storing to~~ store one or more data items;

a filtered data table, communicating with said processor, ~~and capable of storing to~~ store one or more filtered data items;

a filter tree table, communicating with said processor, ~~and capable of storing to~~ store one or more selected selectable data groupings associated with said data items;

wherein said processor is adapted to:

receive[[s]] user inputs from said user interface, said user inputs including selections and de-selections of said selectable data groupings in said filter tree table,

control[[s]] a flow of data items into said unfiltered data table,

generate[[s]] at least one filtering query using based on said selected data groupings in said filter tree table,

run[[s]] said ~~at least one~~ filtering query against said unfiltered data table,

fill[[s]] said filtered data table with filtered data items from said unfiltered data table,

display[[s]] said filtered data table using said user interface, and

display[[s]] said filter tree table using said user interface, ~~accepts user inputs to said filter tree table, and generates a filtering query upon receipt of a user input.~~

38. (Currently Amended) The apparatus of claim 37, wherein ~~said information retrieval apparatus comprises~~ said processor, said unfiltered data table, said filtered data table and said filter tree table are hosted by a data server accessible to a plurality of clients in a client-server arrangement.

39. (Currently Amended) The apparatus of claim 37, wherein ~~said information retrieval apparatus comprises~~ said processor, said unfiltered data table, said filtered data table and said filter tree table are hosted by a user computer that further includes input and output devices.

40. (Currently Amended) The apparatus of claim 37, further comprising a data source interface, communicating with said processor, ~~and capable of receiving~~ to receive data from one or more external data sources.

41. (Currently Amended) The apparatus of claim 37, further comprising a data source interface, communicating with said processor, ~~and capable of receiving~~ to receive data items from one or more external data sources[,], and ~~wherein said data source interface is capable of translating~~ translate said received data items into a predetermined data format.

42. (Original) The apparatus of claim 37, further comprising at least one internal data source communicating with said processor.

43. (Currently Amended) The apparatus of claim 37, wherein said filter tree table is ~~capable of storing~~ adapted to store data item counts corresponding to each data grouping.

44. (Currently Amended) The apparatus of claim 37, wherein said filter tree table is ~~capable of storing~~ adapted to store data item results corresponding to each data grouping.

45. (Currently Amended) The apparatus of claim 37, wherein said processor is ~~capable of generating~~ adapted to generate a display of one or more data items corresponding to selected data groupings in said filter tree table.

46. (Currently Amended) The apparatus of claim 37, wherein said processor is ~~capable of generating~~ adapted to generate a display of a parametric filter comprising data groupings stored in said filter tree table.

47. (Currently Amended) The apparatus of claim 37, wherein said processor is ~~capable of generating~~ adapted to generate a display of a parametric filter comprising data groupings and data item counts stored in said filter tree table.

48. (Currently Amended) The apparatus of claim 37, wherein said processor is ~~capable of generating~~ adapted to generate a display of a parametric filter comprising data groupings and data item results stored in said filter tree table.